

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An information recording medium comprising:

a substrate; and

a print pattern formed on the substrate and containing

a first colorant which changes at least one property selected from the group consisting of a color and a dielectric constant ~~of the thereof first colorant~~ upon application of ~~[[a]]~~ an ~~first~~ electromagnetic field having a first intensity, wherein the first colorant contains microcapsules each comprising a liquid crystal material and a film encapsulating the liquid crystal material or microcapsules each comprising a mixture of a liquid and a color substance which causes electrophoresis and a film encapsulating the mixture, and

a second colorant which behaves differently from the first colorant upon application of the first electromagnetic field.

Claim 2 (Original): The medium according to claim 1, wherein the first colorant changes the color thereof upon application of the electromagnetic field, and the second colorant maintains the color thereof unchanged independently of the intensity of an electromagnetic field applied.

Claim 3 (Currently Amended): The medium according to claim 1, wherein the first colorant changes the color upon application of the ~~first~~ electromagnetic field, and the second colorant maintains ~~[[a]]~~ the color of the thereof second colorant unchanged upon application of the ~~first~~ electromagnetic field and changes the color ~~of the thereof second colorant~~ upon

application of ~~[[a]]~~ an ~~second~~ electromagnetic field having a second intensity higher than the first intensity.

Claim 4 (Original): The medium according to claim 1, wherein the first and second colorants change the colors thereof upon application of the electromagnetic field, and a time required for the first colorant to change the color thereof after application of the electromagnetic field differs from a time required for the second colorant to change the color thereof after application of the electromagnetic field.

Claim 5 (Original): The medium according to claim 1, wherein the first colorant changes the dielectric constant thereof upon application of the electromagnetic field, and the second colorant maintains the dielectric constant thereof unchanged upon application of the electromagnetic field.

Claim 6 (Original): The medium according to claim 1, wherein the first colorant containing liquid crystal microcapsules each comprising a liquid crystal material and a film encapsulating the liquid crystal material.

Claim 7 (Original): The medium according to claim 6, wherein the liquid crystal material contains a dichroic dye.

Claim 8 (Original): The medium according to claim 7, wherein the second colorant contains liquid crystal microcapsules each comprising a liquid crystal material containing a dichroic dye and a film encapsulating the liquid crystal material.

Claim 9 (Original): The medium according to claim 8, wherein an average grain size of the liquid crystal microcapsules in the first colorant differs from an average grain size of the liquid crystal microcapsules in the second colorant.

Claim 10 (Original): The medium according to claim 1, wherein a surface of the substrate to which the print pattern is provided is conductive, and the medium further comprises a transparent electrode which faces the conductive surface of the substrate with the print pattern sandwiched therebetween.

Claim 11 (Original): The medium according to claim 1, wherein the print pattern comprises a first pattern containing the first colorant and a second pattern containing the second colorant.

Claim 12 (Original): The medium according to claim 11, wherein the first and second patterns form at least one pattern selected from the group consisting of a bar code pattern and a dot matrix pattern.

Claim 13 (Currently Amended): A method of reproducing information recorded on an information recording medium, which comprises a substrate and a print pattern formed on the substrate and containing a first colorant which changes at least one property selected from the group consisting of a color and a dielectric constant ~~of the~~ thereof first colorant upon application of ~~[[a]]~~ an ~~first~~ electromagnetic field having a first intensity, wherein the first colorant contains microcapsules each comprising a liquid crystal material and a film encapsulating the liquid crystal material or microcapsules each comprising a mixture of a liquid and a color substance which causes electrophoresis and a film encapsulating the

mixture, and a second colorant which behaves differently from the first colorant upon application of the first electromagnetic field, comprising:

reproducing the information by applying an electromagnetic field to the medium.

Claim 14 (Currently Amended): The method according to claim 13, wherein  
the first colorant changes the color ~~of the first colorant~~ thereof upon application of the ~~first~~ electromagnetic field having the first intensity, and the second colorant maintains  $[[a]]$  the color ~~of the~~ thereof ~~second colorant~~ unchanged upon application of the ~~first~~ electromagnetic field having the first intensity, and

the reproduction of the information comprises applying the ~~first~~ electromagnetic field having the first intensity to the medium, thereby ~~developing~~ displaying an image  $I_{g1}$  different from an image  $I_{g0}$  ~~maintained~~ displayed when no electromagnetic field is applied.

Claim 15 (Original): The method according to claim 14, wherein  
the second colorant changes the color thereof upon application of an electromagnetic field having second intensity higher than the first intensity, and

the reproduction of the information comprises applying the electromagnetic field having the second intensity, thereby displaying an image  $I_{g2}$  different from the image  $I_{g0}$  and the image  $I_{g1}$ .

Claim 16 (Currently Amended): The method according to claim 13, wherein  
the first and second colorants ~~changes~~ change the color ~~of the first colorant~~ thereof upon application of the ~~first~~ electromagnetic field having the first intensity, ~~the second colorant changes a color of the second colorant upon application of the first electromagnetic field~~, and a time required for the first colorant to change the color ~~of the~~ thereof ~~first colorant~~

after application of the ~~first~~ electromagnetic field having the first intensity differs from a time required for the second colorant to change the color of the ~~thereof second colorant~~ after application of the ~~first~~ electromagnetic field having the first intensity, and

the reproduction of the information comprises applying the ~~first~~ electromagnetic field having the first intensity to the medium, thereby sequentially ~~developing~~ displaying an image  $I_{gt1}$  different from an image  $I_{g0}$  ~~maintained~~ displayed when no electromagnetic field is applied and an image  $I_{gt2}$  different from the image  $I_{g0}$  and the image  $I_{gt1}$ .

Claim 17 (Currently Amended): A method of discriminating an information recording medium, which comprises a substrate and a print pattern formed on the substrate and whose genuineness is unknown, between a counterfeit information recording medium and a genuine information recording medium which comprises a substrate and a print pattern formed on the substrate and contains a first colorant which changes at least one property selected from the group consisting of a color and a dielectric constant ~~of the first colorant thereof~~ upon application of ~~[[a]]~~ an first electromagnetic field having a first intensity, wherein the first colorant contains microcapsules each comprising a liquid crystal material and a film encapsulating the liquid crystal material or microcapsules each comprising a mixture of a liquid and a color substance which causes electrophoresis and a film encapsulating the mixture, and a second colorant which behaves differently from the first colorant upon application of the ~~first~~ electromagnetic field having the first intensity, comprising:

applying an electromagnetic field to the medium whose genuineness is unknown.

Claim 18 (Original): The method according to claim 17, wherein

the first colorant changes the color thereof upon application of the electromagnetic field having the first intensity, and the second colorant maintains the color thereof unchanged upon application of the electromagnetic field having the first intensity, and

the method further comprises comparing at least one of an image  $I_{g1}$  displayed by the genuine medium when the electromagnetic field having the first intensity is applied and an image  $I_{x0}$  displayed by the medium whose genuineness is unknown when no electromagnetic field is applied, with an image  $I_{x1}$  displayed by the medium whose genuineness is unknown when the electromagnetic field having the first intensity is applied.

Claim 19 (Original): The method according to claim 17, wherein

the first colorant changes the color thereof upon application of the electromagnetic field having the first intensity, and the second colorant maintains the color thereof unchanged upon application of the electromagnetic field having the first intensity and changes the color thereof upon application of an electromagnetic field having a second intensity higher than the first intensity, and

the method further comprises at least one of comparing an image  $I_{x1}$  displayed by the medium whose genuineness is unknown upon application of the electromagnetic field having the first intensity with an image  $I_{g1}$  displayed by the genuine medium upon application of the electromagnetic field having the first intensity, and comparing an image  $I_{x2}$  displayed by the medium whose genuineness is unknown upon application of the electromagnetic field having the second intensity with an image  $I_{g2}$  displayed by the genuine medium upon application of the electromagnetic field having the second intensity.

Claim 20 (Original): The method according to claim 17, wherein

the first and second colorants change the colors thereof upon application of the electromagnetic field having the first intensity, and a time  $t_1$  required for the first colorant to change the color thereof after application of the electromagnetic field is shorter than a time  $t_2$  required for the second colorant to change the color thereof after application of the electromagnetic field, and

the method further comprises at least one selected from the group consisting of:

comparing an image  $I_{xt1}$  displayed by the medium whose genuineness is unknown after a time  $t_3$  has elapsed from application of the electromagnetic field having the first intensity, the time  $t_3$  being not less than the time  $t_1$  and less than the time  $t_2$ , with an image  $I_{gt1}$  displayed by the genuine medium after the time  $t_3$  has elapsed from application of the electromagnetic field having the first intensity;

comparing an image  $I_{xt2}$  displayed by the medium whose genuineness is unknown after a time  $t_4$  has elapsed from application of the electromagnetic field having the first intensity, the time  $t_4$  being not less than the time  $t_2$ , with an image  $I_{gt2}$  displayed by the genuine medium after the time  $t_4$  has elapsed from application of the electromagnetic field having the first intensity; and

comparing the image  $I_{gt1}$ , the image  $I_{gt2}$ , and an image  $I_{g0}$  displayed by the medium whose genuineness is unknown when no electromagnetic field is applied.

Claim 21 (Original): The method according to claim 17, wherein the first colorant changes the color of the first colorant upon application of the first electromagnetic field, and the second colorant maintains a color of the second colorant unchanged upon application of the first electromagnetic field and changes the color of the second colorant upon application

of a second electromagnetic field having a second intensity higher than the first intensity, and the method further comprises:

comparing an image  $I_{x2}$  on the medium whose genuineness is unknown upon application of the second electromagnetic field with an image  $I_{g2}$  on the genuine medium upon application of the second electromagnetic field.

Claim 22 (Original): The method according to claim 17, wherein the first colorant changes the color of the first colorant upon application of the first electromagnetic field, the second colorant changes a color of the second colorant upon application of the first electromagnetic field, and a time  $t_1$  required for the first colorant to change the color of the first colorant after application of the first electromagnetic field is shorter than a time  $t_2$  required for the second colorant to change the color of the second colorant after application of the first electromagnetic field, and the method further comprises:

comparing an image  $I_{xt1}$  on the medium whose genuineness is unknown after a time  $t_3$  has elapsed from application of the first electromagnetic field, the time  $t_3$  being not less than the time  $t_1$  and less than the time  $t_2$ , with an image  $I_{gt1}$  on the genuine medium after the time  $t_3$  has elapsed from application of the first electromagnetic field.

Claim 23 (Original): The method according to claim 17, wherein the first colorant changes the color of the first colorant upon application of the first electromagnetic field, the second colorant changes a color of the second colorant upon application of the first electromagnetic field, and a time  $t_1$  required for the first colorant to change the color of the first colorant after application of the first electromagnetic field is shorter than a time  $t_2$  required for the second colorant to change the color of the second colorant after application of the first electromagnetic field, and the method further comprises:



comparing an image  $I_{xt2}$  on the medium whose genuineness is unknown after a time  $t_4$  has elapsed from application of the first electromagnetic field, the time  $t_4$  being not less than the time  $t_2$ , with an image  $I_{gt2}$  on the genuine medium after the time  $t_4$  has elapsed from application of the first electromagnetic field.

Claim 24 (Original): The method according to claim 17, wherein

the first colorant changes the color of the first colorant upon application of the first electromagnetic field, the second colorant changes a color of the second colorant upon application of the first electromagnetic field, and a time  $t_1$  required for the first colorant to change the color of the first colorant after application of the first electromagnetic field is shorter than a time  $t_2$  required for the second colorant to change the color of the second colorant after application of the first electromagnetic field, and the method further comprises:

comparing an image  $I_{gt1}$  on the genuine medium after a time  $t_3$  has elapsed from application of the first electromagnetic field, the time  $t_3$  being not less than the time  $t_1$  and less than the time  $t_2$ , an image  $I_{gt2}$  on the genuine medium after a time  $t_4$  has elapsed from application of the first electromagnetic field, the time  $t_4$  being not less than the time  $t_2$ , and an image  $I_{g0}$  on the medium whose genuineness is unknown when no electromagnetic field is applied.